AMENDMENTS TO THE CLAIMS

Please add new claims 14-17 and amend the remaining claims as set forth below. This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (*Currently Amended*) A wide bandwidth Raman amplifier comprising:

a single ~~at least one~~ multiwavelength wideband laser pump ~~source for~~ producing a wideband pump radiation signal having a plurality of different radiation wavelengths, and

means for adjustable independent power control of each of the plurality of different radiation wavelengths of said wideband pump radiation signal produced by said single laser pump ~~source~~.

2. (*Currently Amended*) An amplifier according to claim 1, further comprising a plurality of multiwavelength wideband laser pumps, each multiwavelength wideband laser pump producing a wideband pump radiation signal having a plurality of different radiation wavelengths~~wherein said at least one multiwavelength wideband laser pump source comprises a plurality of multiwavelength wideband laser pump sources~~.

3. (*Currently Amended*) A wide bandwidth Raman amplifier comprising:

a single multiwavelength wideband laser pump ~~source for~~ producing a wideband pump radiation signal having a plurality of different radiation wavelengths, and

means for adjustable independent power control of each of the plurality of different radiation wavelengths of said wideband pump radiation signal produced by said single multiwavelength wideband laser pump ~~source~~, wherein the means for independent power control comprises one or more reflectors.

4. (*Currently Amended*) An amplifier according to claim 3 wherein each reflector produces optical feedback to the single multiwavelength wideband laser pump ~~source~~ at a respective different one of said plurality of wavelengths.

5. (*Currently Amended*) An amplifier according to claim 1, wherein the means for power control of each ~~pump~~ radiation wavelength comprises at least one variable optical attenuator.

6. (*Previously Presented*) An amplifier according to claim 3 wherein there is a separate variable attenuator for each reflector.

7. (*Currently Amended*) An amplifier according to claim 1 wherein at least some ~~pump~~ radiation of more than one wavelength is coupled to the signal to be amplified.

8. (*Previously Presented*) An amplifier according to claim 5, further comprising control means for controlling and/or adjusting the attenuation of the at least one variable optical attenuator.

9. (*Previously Presented*) An amplifier according to claim 1, wherein the means for independent power control comprises at least one optical switch providing either substantially no attenuation or substantially 100% attenuation depending on the setting of the switch.

10. (*Previously Presented*) An amplifier according to claim 9, further comprising control means for selectively controlling the at least one switch to change the overall characteristics of the amplifier.

11. (*Currently Amended*) A method of providing a wide bandwidth Raman amplifier, wherein the method comprises producing, from a single multiwavelength wideband laser pump ~~source~~, a wideband pump radiation signal by providing independently adjustable optical feedback to the laser pump ~~source~~ at a plurality of different wavelengths of said wideband pump radiation signal produced by said single ~~pump~~ laser pump~~source~~.

12. (*Currently Amended*) A wide bandwidth Raman amplifier producing a wideband pump radiation signal having a plurality of different wavelength components from a single multiwavelength wideband laser pump ~~source~~, said amplifier comprising means for independently adjusting the magnitudes of a plurality of different wavelength components of said wideband pump radiation signal to alter the amplifier gain profile during amplifier operation.

13. (*Previously Presented*) A wide bandwidth Raman amplifier including only one laser pump source of pump radiation, and means for producing from the pump source a wideband pump radiation signal having a plurality of different wavelength components, said means for producing including:

means including at least one reflector for adjustable independent power control of plural of said different radiation wavelengths wherein each reflector produces optical feedback to the pump source at a different one of said wavelengths.

14. (*New*) An amplifier according to claim 1, wherein said single multiwavelength wideband pump includes only a single pump laser.

15. (*New*) A method according to claim 11, wherein said single multiwavelength wideband pump includes only a single pump laser.

16. (*New*) An amplifier according to claim 12, wherein said single multiwavelength wideband pump includes only a single pump laser.

17. (*New*) An amplifier according to claim 13, wherein said one laser pump source includes only a single pump laser.